

## RESPONSE TO OFFICE ACTION SUMMARY

May 5, 2003

Commissioner for Patents

P.O Box 1450

Alexandria VA 22313-1450

Petition to examiner Patricia L Hailey

#4 A  
5/12/03  
PCH

Pertaining to Office Action Summary date mailed 04/07/2003, regarding patent application serial number 09/ 955,254, filed by Gene E. Lightner 09/17/2001, response to Office Action is enclosed within, and is referred to numbers within the Office Action Summary.

1. Specification page 6, lines 26-31, as quoted, clearly relate an experiment to show that 70% sulfuric acid, at about 20°C, is of reduced glucose solubility.

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**“EXAMPLE 2**

A<sub>1</sub> Twenty grams of glucose is added to 100 grams of 70% sulfuric acid in a glass beaker to form a mixture. At about room temperature of about 20°C, the mixture is stirred by a glass rod in a futile attempt to dissolve the glucose in 70% sulfuric acid. After a prolonged time, the glucose did not dissolve in the 70% sulfuric acid resulting in a phase of glucose and a phase of 70% sulfuric acid saturated with glucose.” Accordingly specification page 6, lines 26-31 is devoid of new matter, and is excluded from amendment to remain as stated.

2. Regarding 35 U.S.C. 112 and the quotation from the second paragraph, “The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” Quotation from page 5, line 12-14, “In the preferred embodiment of the present invention, sugars derived from a biomass, contained in a hydrolysate, are separated from the hydrolysate as an insoluble phase to produce sugars and a hydrolysate for recycle.” Moreover, delineation of page 7, claim 1, within the preferred embodiment of the present invention, is contributed.

“What is claimed is:

1. A method for separating sugars from a biomass hydrolyzed by an aqueous acidic solution which comprises:

providing a hydrolysis vessel for hydrolysis of a biomass, and

providing a supply of said biomass to said hydrolysis vessel, and

providing a supply of said aqueous acidic solution to said hydrolysis vessel, and

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Example 2 within specification page 6, lines 26-31 is composed of a complete account and remains as stated and is accordingly excluded from amendment.

The current patent application has fulfilled requirements of 35 U.S.C. 112, second paragraph.

Pertaining to a quotation of the appropriate paragraphs of 35 U.S.C. 102. The current patent application is devoid of any information obtained from all publications or public use or sale less than one year prior to the date of this application. Thus requirements of 35 U.S.C. 102, appropriate paragraphs, have been fulfilled.

An antecedent basis for amended claims has been established, and claim 16 has been deleted so that claim 17 becomes claim 16.

Within the present invention claim 1, transfer of hydrolysate to a phase forming vessel to form two phases; a sugar phase and an aqueous acidic solution phase, is devoid within the prior art.

Accordingly prior art is without application, within the present invention claim 1.

An inquiry is unanticipated presently.

It is expected that, upon examination of these explanations, all claims will be allowed by the examiner.

A clean copy, 2 pages, of all claims and amended claims, is provided.

Very respectfully,

A handwritten signature in cursive script that reads "Gene E. Lightner".

Gene E. Lightner